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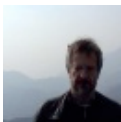
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post choreographic

Posted by [Johannes Birringer](#) on March 11, 2008 at 1:41pm

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04/10/2008

Somehow there are lost tracks, can't find them.

I started a discussion on the **post-choreographic** inside the dance tech list, on January 21. originally titled "repertory worlds" - and it began to overlap with a discussion group on the dance tech net, "Internet. Market. Choice. Dance. Industry. Sell. Buy. Process." and it then converged with or got layered into the Video interview discussion on "digital materialism (the video Marlon had produced for his interview with Gideon Obarzanek from Chunky Move), and my subsequent attempt to read GLOW against SILENT ROOM (by Skoltz_Kolgen). Then we lost track of the debate on the **post choreographic**.

I try to pick up the thread here.

<< dance tech list, 03.10>>

Our recent discussion of the "**post-choreographic**" seems to have ended in a bit of an unresolved state

-- our attention shifted to “Glow” and “Silent Room” after Hélène urged us to look Skoltz_Kolgen & I became interested in what S_K call “contamination of the senses”.....

-- i'm afraid I did not fully answer Matt's very cogently argued points about the “technological and perceptual context of the sensors” in his February 20 **post**.

Naturally, it would nice to hear from others.

To refresh ::[Matt wrote]

>>

in «suna no onna» there are three elements which form the **choreographic** structure; scenario, scenography and sensors. using these elements the performers engage in realtime composition and improvisation.

whilst the improvisation and composition may occur after the creation of a **choreographic** structure they are not '**post choreographic**'. if we were to follow your logic then all performance would be '**post-choreographic**' in that it resulted 'from', rather than 'being' the choreography.

the sensorial 'flow' in «suna no onna» may be emergent but the 'data' itself is not. you have chosen the

- type of sensors
- location of sensors
- sensor sampling rate
- sensor sensitivity range
- sensor communication protocol
- affect sensor can have on the environment

all these things are a mix of structure and form, the 'flow' is emergent content. this flow/content is derived from the actions of the performers, which the sensors /garments are designed to (continuously) sample. the 'sensorial flow' is the outcome of the arrangement of hardware/software. the fact that the performers can use this output as stimulus is irrelevant. the flow is a function of your **choreographic** and dramaturgical structure. >>>

I think Matt has argued quite fervently for a sustainable notion of “choreography” even under conditions of real-time enactment and composition, emergence and complexity within the dramaturgical arrangements for “sensorial flow” and thus, as I tried to suggest, within an undetermined framework for realization or manifestation generating a new performance each time such a “work” is produced. My notion of dramaturgy here is directec clearly towards the sensorial and experiential, and a kind of "design in motion".

Even as I agree with everything Matt lists above (referring to the sensors and the “design”), I still would not think of the performance techniques we work with as “**choreographic**” – I don't know what word to use.

I never experienced the sensors to be predictable or behaving according to protocol, and if you suggest that all movement is always (Judson example) “adaptable” to specific and changing circumstances, thus following “**choreographic** rules”, then I am at a loss for words again, as on the one hand it would make the term **choreographic** apply to anything (thus making it less useful , no?), and on the other it would exclude a fluidity in the structural itself. For me structure is not something fixed or determined as you imply in your examples. I can easily undestand STRUCTURE AS OUTCOME. that is what I thought was implied by my suggestion of the **post-choreographic**.

Our performers are not working in the way you suggest, are not following rules nor adapting, strictly speaking, even to a changing sensorial & digital (virtual) environment. I was thinking that the real time composition of the actions and reactions to responsive behaviors in the projected (perceived, seen, heard, felt, touched...) environment creates an interfacial momentum that, unlike your structural argument, is

much more molecular.

>>but all 'moving' objects (physical or represented/mediated) in a
>>performative setting are choreographed>>

well. Not really, . You reply to my suggestions saying that “wanting to explore the sensate does not exclude the **choreographic**,” and you may very well be right. All of our performance techniques and the real-time enactions were owed to the exploration of the tactile and sensorial garments as “characters,” and we certainly did work off a narrative structure. But this structure did not determine the objects. We didn't think that the enactions and the sensorial processes were enframned by the **choreographic** as an apparatus of distribution and organization. That apparatus seemed to have receded from sight.

**

I read production notes from Fahrudin Salihbegovic the other day, he had created a “digital performance” in Serbia and written about their struggling with sensors and digital environment programming. He comes to the conclusion that he had wanted to transform the theatre into a new cybertheatre of interactivity, but when he noticed that the sensors were not working, he thought they had nevertheless created a “dramaturgy of digital performance” for interactivity. He says that “it was proven to us that a performance can be interactive and at the same time be organized as a stable dramaturgical structure. We simply created a dramaturgical space for the interactivity, a framework for its safe use” (they ended up using a camera interface for Isadora video effects in “Waar is daar”).

My point (regarding Suna no Onna) was exactly the opposite. We were not creating a safe structure. Although i might be deluding myself, since we had a scenario for sure, carefully "set in motion,." Yet i have also, like Fahrudin, experienced enough situations where we or someone worked with brittle interfaces and ended up having a back up plan (plan B), to simulate the interactivity or play tape (as was done in the Trisha Brown touring of "how much....."), some strange cases of bad faith indeed.

Performing with the sensorial garments to create a “wearable space” can't result in an interfacial composition in the digital sense of enaction if the emergent flow is not changing the environment. If it does not change the environment, I am afraid we end up with uninteresting choreography, at least I would fear so in the context of the digital and the way it is explored through real time enactment and interactivity. I could be wrong though, Richard Povall has argued strongly for carefully rehearsed and well crafted choreography, if i understand him correctly, and Richard of course worked with Big Eye early on. Those were the days, the early adapter days. now the Royal Ballet does it too. ("Electric Counterpoint, Royal Ballet " :

http://entertainment.timesonline.co.uk/tol/arts_and_entertainment/stage/dance/article3492122.ece)

With regards
Johannes Birringer
DAP-Lab

Tags: [real](#), [time](#), [choreography](#), [/](#), [post](#), [composition](#)

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8 Comments



Comment by [mpgough](#) on March 12, 2008 at 6:07am

you suggest i have your working methods for «Suna no Onna» so perhaps you can be more explicit about them.

- what are your sensors and how do they work?

- what is scenario / structure used?
- how do the performers 'navigate' the work

if «Suna no Onna» is **post choreographic** then lay the work out clearly, talk about each element in detail so we can all understand.

simply saying 'thats not what we do' is not enough, you give no concrete examples. nor do you ever really provide a rigorous counter position.

i doubt you have even created a 'wearable' space, only an interface. you need to share the 'how' not just your concept / thoughts about the work. only then can you attempt to argue for something 'after/other than' choreography.



Comment by [Johannes Birringer](#) on March 12, 2008 at 12:37pm
you are welcome to come to rehearsals and wear the space,

i can lay out the concepts here, but i thought i was already doing that when i explained my understanding of our practice and how we work. I started laying out our how since the summer of 06 when i posted about the senor work we were doing in the Interaktionbslabor. and our practice is described in our lab web pages.

<http://people.brunel.ac.uk/dap/dap.html>

Now you are become so rigorous in your replies that you leave little room for anyone else not using or used to your argument of what choreography is.

I am not a statistician either. (:



Comment by [mpgough](#) on March 12, 2008 at 3:03pm
in all the documents you generally talk around the 'technology' rather than giving specifics. in the rare instances when function is discussed the real/virtual, virtual/real sensor mapping is explicit, choreographed and 'triggered'.

you are adept avoiding basic questions about your work and theory. that is what i address. you would have no complaints about my 'rigour' if it supported your position. or you had a fuller response.

the key issue i have is that you 'break' a very general understanding of choreography without offering any alternative fix.

more importantly you should take the time to give a brief & clear description of your concepts / tools here. do not expect everyone to wade through texts that are/maybe out of date.

there is lots of room for replies, my comments do not prevent them. and without them you are talking to yourself. at least in terms of public replies.

all i'm asking for is more context and clarity in your writing. it is not enough to say 'experience it', as a scholar you should be able to describe both the 'artifacts' and your 'experience' of them.



Comment by [Johannes Birringer](#) on March 17, 2008 at 5:07pm
Well, i disagree, i rarely talk about the technology and mostly talk about content and ideas that come from the work or go into the work, and have been doing so for years, and when our lab company started working with sensors and sensor choreographies, I described the work and our working methods at lenght and documented them in the Interaktionslabor archive for everyone to

seeso i am a little puzzled by your suggestion I avoid questions about my work, i don't think i am known for avoiding..... You also keep insisting that I have to be scholar for you, and I think I don't.

I can break your understanding of choreography (although that is hardly my agenda) as long as i describe what i am doubting, what i am investigating, and what i perceive our performers doing in the way we work together and explore/experience the very tactile performance techniques with the sensual garments. No offense to you or your notion of choreography was intended.

I suggested the work was not captured/choreographed, we don't use the language of choreographing (organizing movement phrases and repeating them to learn them), we don't set up a movement structure or spatial organisation, though we have "scenes" and "story-boards"; i sought to propose the term **post-choreographic** in the analogous sense in which continental theory has discussed the **post-dramatic** (Lehmann) without that such a concept implies there is no more drama or no more theatre. I implied that real time performance (and interactive systems) has a different position vis a vis the choreographed.

If you want a precise description of our sensorial garments with which the dancers compose the emergent characters in real time, here is context and our collection:

In the work process generated at the DAP Lab (Design and Performance Laboratory) in London, we patch together methods from the performing arts, fashion, engineering and computer science environments to produce interactive garments for performance scenarios in which new wearables can be explored and developed as “design in motion.”

Our "emergent dress" prototypes – garments which were not completed initially [and some remain so] but explored through movement and gesture by performers and then developed into fully formed and fitted „character-designs“ – adapt the transformative technologies of the digital media but highlight the sensual dimensions of their conductive nature and plasticity. The garments are tested in our telematic studio where we collaborate with other performers online. Performances with the wearables are never the same as both the characterizations and the programming change in each instance of an adaptation. We question how the design of intelligent garments incorporating interfacial technologies influences performance dynamics and "choreography," how movement expression and motivated behavior inspire fashion design concepts (and vice versa), and then create real-time interactive artworks that crystallize the impact of extreme fabrication on fashion performance in immersive projection environments.

We shift and transform the wearer-garment relationship and garment state (physical/virtual) through our combined uses of materials, tools and technologies and interdisciplinary working practices. Performer techniques are individually based on each performer's unique relationship (tactile, psychological, somatic/kinaesthetic) to the cloth and the various garment characters within the work's narrative frame. The group prefers to work with narrative content yet also uses improvisatory dialogues with abstract anime forms and digital animation. The work integrates the materiality of new media technologies (computing) and the functioning processes which themselves embody specific materialities into the tissue of the dress. Motion graphics (ScreenDress), sensor (SensorDress) and motion capture technologies (CaptureDress) overlap with the dress to form its extreme makeup and extend its information-sensing-processing and networking capabilities. Furthermore, parts of the garments have acoustic qualities, and the wearables in movement are accompanied by live real-time sound mixes performed by our composer whose aesthetic process echoes the layering used for the fabrics and digital animation landscapes.

The Teshigahara collection has the following artifacts (fashion concepts by our collaborator Michèle Danjoux):

DunesWoman: [Morphic] SandCoat with Sensors, Worksuit, Fishskin with Photocells, Leather Sensor Sleeve, Gloves, Belt, Spider Amulet.

- BlueSpirit: [Liquid] Playsuit, Black Jersey Sensor Sleeve, 2 pairs of Gloves, Headscarf.
- FolkWoman: [Rhythm] Sandsuit, Obi, Headscarf, Beetle Amulet, Silk Ties for Hands.
- BeetleBody: Leather Gilet/Shell, Mask, Sensor Sleeve, Headscarf, Long Gloves, Leg Garter, Leggings.
- EvilVillage: [RecycleDress] Dress with Leather Hood, Headscarf, Leg Warmers, Beetle Amulet.
- CaptiveMan: Royal Coat, White Shredded Garment.

In subsequent posts, i will talk about the narrative enframing as a method to open up the emergent content and properties as structural decompositions (the **post choreographic**).



_Comment by [mpgough](#) on March 17, 2008 at 6:21pm

narrative enframing = structure

structural decompositions (resulting from the structure)

emergent content and properties (emerging from the structure)

the structure is choreography (drama/theatre)

if you could break the definition of choreography i offer you would have. thus far you have failed to do so. you would also find yourself breaking your own concept of the '**post-choreographic**'.

if you want to claim a new 'concept / approach' to choreography (or any practice) you need to show how you have enabled that. if you want to use words such as 'interactive' you need to prove that the work is such. this means talking about the technology, not just the ideas.

ideas are different from their implementations.

you still have not explained (for example) how the dresses function and are constructed. what are the sensors, where are they placed, what is the data, where and how is it used. how aware are the dancers of the data that they are producing.

you also fail to see that the 'scenes' and the dresses are the '**choreographic**' structure from which the improvisation emerges.

most importantly you confuse realtime performance, with realtime composition. and, if there was no 'structure' you would not even have raised (on the list) the issues that the most recent version of the work is 'different' from the last.

but even from the scant details you provide is the clear that the elements you use (costumes, scenario, scenography etc) have a common structural thread. this is the point of departure that identifies the (**choreographic**) structure.

also, how can you 'question' something unless you seek to understand how it operates and can be experienced. nothing can do all things. everything has bounds and that is how we shape our understanding.

the dresses have limitations and functions. if they are linked then they also have common features, but you mention none of this.

for example, what motion capture technologies does the motion-capture dress use. how can the data produced by the dress be applied. give an example of application form the performance.

or, better still **post** 5-10 mins un-edited video excerpt from the performance.

to 'crystallize' is to create a structure. so what is it?

all i really see you trying to suggest is that complex/emergent and improvised performance does not have 'structure'. even my undergrad students know that is not true.

simple interactions (rules / structures) are at the heart of emergent / complex behavior. but you seem unable to identify why these things are in your own work.

making an analogy to another theory does not prove or support your own (proto) theory. to imply something, does not mean 'it is'.

and i really don't think the examples you gave are at all precise ... 'sensor' means nothing. what does it sense and how?

for example the 'photocells': are they digital or analog, are they calibrated, what data do they provide (values or on/off), are they sensitive to a specific type of light? where are they placed on the 'fishskin', how are they 'networked'.

all these aspects are important to know. otherwise your claim of 'interactivity', 'intelligence' and 'design by motion' for garments could be false.

i'd be more than happy if you could validate your claims. but i remain frustrated that you don't. you offer nothing concrete to share with other practitioners and students to develop '**post**-choreographic' work.

that's what i'm asking for. not your ideas but principles / methodologies with good examples / evidence. not just for me but everyone who wants to extend their practice.



Comment by [Johannes Birringer](#) on March 21, 2008 at 12:19pm

Part II. (I continue where I left off earlier, sorry about that - I was traveling abroad).

But since (in the current conversation) it seems unlikely that agreement (either/or) can be found, I'll start from the response's initial synopsis:

<<<
 narrative enframing = structure
structural decompositions (resulting from the structure)
emergent content and properties (emerging from the structure)

the structure is choreography (drama/theatre)
>>.

I'm quite happy to resign myself in saying that we can't seem to move along this axis; I also never claimed a new theory, I was proposing to think about something I referred to as "**post-choreographic**" (since 2006, when I still phrased my questions in regard to "sensor choreography" and working with interactive real time collaborative composition), and those questions arose from our working methods, which i explained in great detail,

(for the archive:

[Sensordance, interactive game, webcam dramaturgy #1.](#)

[Sensordance, interactive game, webcam dramaturgy #2.](#)

[Sensordance, interactive game, webcam dramaturgy #2 .](#)

[Sensordance, interactive game, webcam dramaturgy #2](#) .

and so on, the debate lasted for a while, in the fall of 2006).

Now, in 2008: I tend to not see "structure as = choreography. That to me is not an interesting concept, and ideas & practices – informed by concepts - are what we are discussing.

I come back to the working methods and sensor functions later. The sensor interfaces are just one elements of several systems, which we see (in our work) as interactional. I am calling them thus, as we are not working from a **choreographic** approach.

I rephrase the positions we started out with in our lab:

1. "choreography" and "computation" indicate distinct systems which do not know each other (if we follow Niklas Luhmann's theory of self-organizing systems).

2. Interaction (interactivity) is believed to couple these systems structurally.

One of our composer collaborators (P.Chagas) added:

>>>The discourse of interactivity stresses the embodiment of information, the material interface between bodies and digital machines and the emergence of the transmedial cognitive and affective experience.

Embodiment or enaction is opposed to the idea of representation, which has been the paradigm on informatics and cybernetics of the first order and is still referenced in research on artificial intelligence. The enactive approach views cognition as embodied action, as a structural coupling between systems that reflect each other's histories and make possible the emergence of a world. Embodiment is the domain of interactions between autonomous systems that are in principle closed and communicate only through self-reference but can undergo transformations when structurally coupled. This domain of interactions is the being-in-the-world of cognition. It cannot be reduced to the notion of body as a physical entity, such as the structure of bones and muscles or electronic circuits. >>>

The coupling I call real-time composition – a collaborative process, and screen projection environment is an equal part of the composition.

Now to our narrative system, the decompositions, and the garments (incorporating sensors), scenography, sonic real time environment.

I want to create a bit more context so that "Suna no Onna" might be reflected upon through what I suggest here.

(abbreviated case study 1). Interactive installation: "seule avec loup" [by N + N Corsino), shown at Monaco Dance Forum 2006. The artists refer to their screen movement animations as scenographies, screens seem to move, images fade away, and text can be a continuous or fragmented flow of appearances and disappearances.....

There were infrared sensors all over the installation space, so if the architecture of this installation was the structure, then the behavior of the visitors, who walked into it to experience it, would be the choreography. But as in other such cases of interactive digital artworks, I don't think one would generally think of the audience stepping inside the room as "choreography" unless one literally follows what was suggested in Matt's posting (the example of the trip wire: set up a trip wire, it then creates movement). But how the presence of people in the Corsinos' architecture changes the screenic occurrences/image movements, that's hardly addressed by thinking of a person standing/walking on floor as performing/improvising.

Here it was suggested that such behavior might be called navigating, and that is probably a better way of thinking indeed, except that in "seule avec loup" I don't remember knowing/realizing what

I might have been navigating, one could often not see / feel or hear what one was affecting, but one still intuited an affect on one's perceptions, perhaps a sense of indetermination.

(abbreviated case study 2): "Swan Quake", by igloo, or their earlier "Summerbranch."

To answer the point Matt made: >> we can think of interactive interfaces in the same way -- as the trip wire -- they are structures that generate movement>>

well, in the case of igloo's interactive installations, they don't. It's quite possible that Ruth Gibson (of igloo) designs the movement of the anims following a **choreographic** aesthetic. I think of choreography in those terms, namely that a particular movement and movement intent (a manner of using particular expressive techniques) composes with the forms and patterns that an audience will read (will read meaning into). In the interface of the installation, the user will navigate through the world via a game controller where moving avatars can be encountered, and this is similar to the gaming scenario of "Walhalla" that I used as my initial platform in 2006, suggesting that the "interpreter" is inot working with a pre-arranged arrangement (hardware/software, projected environment, scenographies, live telematic scenarios) but needing to adapt. The adaptation is composition in real time, using physical techniques developed with sensorial garments or sensors attached to the skin, i.e. these sensorial techniques are created as a form of live cinema/3D world action with a proprioceptive focus or awareness directed at the 3D screen environment.

This adaptation I considered, in the case of someone wearing a sensor dress that interacts with the screenic world, a manner of "re-choreographing," if you will, a "structure" (dynamic narratives/abstractions) that is emergent. The structure is the outcome, not a prisonhouse of rules or presets. A choice of a particular sensor attached to skin and an area of the body (shoulder, elbow, wrist, hip, ankle, etc) is not a choreography. The game is always action, in the present tense. The movement ideas (for "Walhalla") were scripted, but the enactment took place in response to the screenic occurrences and behaviors and often followed the cinematography.

Now, re-choreographing could be said to mean the active compositional work needing to be done in interactive intermedia, where multiple systems are at work.

(abbreviated case study 3): "how long does the subject linger on the edge of the volume...." by Trisha Brown in collaboration with Paul Kaiser/Marc Downie et al. Performed on the proscenium, this work clearly has a choreography to look at (Trisha's). That choreography was completed before the real time mocap system was added and conjoined, and now we have two "choreographies", as Downie speaks of the creature behaviors (created from the live motion analysis of Trisha Brown's dancers) as "**choreographic** the extended agents" -- and i think it's telling that Marc Downie is using the term choreograph in quotation marks:

(I cite from his dissertation....)

The methodological perspective concerns "biologically inspired, agent-based artificial intelligence, taken to a high degree of technical depth. The representations, algorithms and techniques behind such agent architectures are extended and pushed into new territory for both interactive art and artificial intelligence. In particular, the thesis will focus on the control structures and the rendering of the extended agents' bodies, the tools for creating complex agent-based artworks in intense collaborative situations, and the creation of agent structures that can span live image and interactive sound production. Each of these parts becomes an element of what it means to "choreograph" an extended agent for live performance...."

In the performance of "how long", it is not easy to make out what generates what, but one could venture to argue that the agents are **post-choreographic**. They are ex-tensive.

I suggested the analogy to the postdramatic (which might be what Matt calls "neo-structuralist" -- except that in the case of "how long", the agents' movements are not derived from a structure but are a composing architecture, a "machining architecture" [Lars Spuybroek]). They follow

algorithms computationally defined to analyze partial kinetic data (derived from upper bodies of Brown's dancers) and, I think, develop pattern recognition but are also given autonomous intelligence to behave non pattern recognizing. The two "choreographies", if one perceives them together, are contradictory to a certain extent (one, namely Brown's, does not recognize the other as no interactional intent was rehearsed and practiced in performance; the other, namely Downie's is **post choreographic**).

To clarify my analogy:

"Postdramatic theatre refers to theatre or performance practices after drama. In spite of their diversity, new forms and aesthetics that have evolved share an essential quality in common: they no longer focus on the dramatic text, they are not "derived" from structure but are de-compositional; the teleological as an aesthetic logic is deconstructed or avoided.

It seems to me that the misunderstanding we are having here is about this sense of the teleological logic of the aesthetic. All along I have been talking about the non-teleological.

(abbreviated case study 4): "Suna no Onna".

Our team did not use choreography as a making of structures in which dance can occur.

We worked with 4 systems:

1. narrative adaptation of a film world (Teshigahara), using storyboards and an open framework of "states" or moods in which the movement of sand, and the human performers reactions to it could be explored.

2. Sensorial Garments and garments characters, as explained in previous **post**.

3. The concept of a 'wearable space' . Five of the garments incorporate sensors (accelerometers, bend & directional sensor, photocell sensors; they transmit analog midi data via bluetooth to I-CubeX editor/Pd patches, we use values, and send them to the scenography patches/scenes in Isadora, where they affect the movement of a) digital animations b) video, and c) the screen dress (incorporated chroma-keyed motion graphics on the screened dress); the projected environment is a triptych, all images and image movements are projected onto suspended paper which is arranged in a three dimensional manner so that we have flatness as well as depth, the paper also extends onto the floor. Our working method consisted of exploring the wearing and the wearing / tactile interaction with the garments as a dynamic that could yield affective and sensorial relationships (internally experienced, externally experienced) to the spatial (narrative) environment as a whole. The fishskin garment, for example, has three photocell sensors and one temperature sensor built into its surface, at the level of the heart, and lower right sight, above pelvis, the sensors are activated during the love scene between woman in the dunes and scientist-man, affecting the erotic images on screen we see and don't see, depending on how the couple interacts and interactively uses their hands, the small light the woman performer has in her hands, or any other light source in the space, this is all open to the moment to moment adaptation of the behavior of the space.

When i talk of the behavior of the space, i mean to indicate that some image movement (positions and speed within the Isadora projector object that runs the digital videos) can be live-"edited" (for lack of a better word) or influenced by the interactor-performer, some is influenced by scaling of data programmed in the patch, some is influenced by layering (6 projectors are working most of the time, using multiple animations and videos at times), some might act according to the intransigent behavior of the i-Cube transmitters (we have had night when 8 or 9 sensors are transmitting and there were other bluetooth devices in the room and interferences started to happen and produce strange and unexpected results in the projection landscapes). So, for us interactional is meant in a larger sense, not just the computational interface, but also adaptations and modifications of behaviors in real time at all times, including

(4) sonic environment,

- the sound created live by the composer (Oded ben-Tal) who performs with the dancers to affect movement consciousness or interpret what is enacted or re-mixes elements from an aural palette

which is not prearranged but fluid and open. There is no arrangement for the music, but the live mix creates the arrangement.

Our point of departure are the garments, and what we call design in motion. I tried to explain that, and it would more pages here, since again we think of fashion performance as a tactile and aural exploration of cloth (not choreography). The cloth is becoming character and (as was suggested quite correctly) already has its constraints or richness (color, textures, weight, behavior, etc). We work with cloth, therefore, to discover continuously revealing and concealing possibilities, and when i consider such enactment (or emergent behavior) **post-choreographic**, I actually have no high minded theoretical grounds to break whatsoever, but I tend to think that the performance movement our audiences see has (I hope) a sensual beauty or energy that is not reducible to "choreography" as a capture system.

Our mocap data are not real time (as in "how long), they were captured earlier from the dancers and have been re-choreographed into the digital animations (blue spirit, beetle insect, sand).

Actually, come to think of it, our projected sands are sometimes looped (loop being a digital cinematic/videomatic term, beautifully exploited by Toni Dove in her "Artificial Changelings" and by many video artists of course), sometimes they behave in unexpected jittery chaotic manners, sometimes they don't behave at all, sometimes i change the patch in isadora on the fly and program in the moment, etc., thus they may indeed follow Heraclitus's idea but I don't think of it as the "same sand" nor "sand." The "sensorial flow" is not the outcome of the arrangement of hardware/software, nor a function of a "**choreographic** structure," but actually has much to do with how the performance of the wearables composes itself on a given night.

Naturally, the way the garments are constructed (and modified) affects the way one can move in them. We practice wearing them performatively to see whether there is an access to what Kandinsky might have called the inner necessity or spiritual dimension of the sensorial. The performative approaches are based in the three dancers' culturally inflected sensibilities (Japanese, Chinese, African) of "wearing", and again, some may very well think of what they see as **choreographic**. That is fine with me, yet i consider such thinking reductive in the arena of live collaborative composition i've tried to sketch.

Videos/pictures of Suna no Onna are available at:

[Suna Gallery](#) .



_Comment by [mpgough](#) on March 24, 2008 at 10:47pm

"instead of steps and structures, the layering of **post-choreographic** space is really negotiated by codes - complex ways we assimilate and process the raw data of steps, phrases, signals, directions, lines, vectors, matrices, trajectories, changes, etc. merce cunningham made and coined the language and vocabulary and the judson church furthered the transformational rules, i.e., performative grammars."

kenneth king [1981] (2003) <http://tinyurl.com/2l4efn>

of course, codes are structured interactions and processes. but king is referring to is the freedom / ability to engage in real-time composition. note this usage precedes yours.

sociological examples of self-organisation are different from the artistic. luhmann's theory does not really 'fit' creative practice. however, you fail to notice that 'organization' and 'systems' have structures.

also, 'generative choreography' (e.g. accumulation) show that "choreography and computation" do know each other. processing / processes follow structures. structures are not implicitly representations.

to decompose something requires breaking down its composition (structure). thus, a decomposition is derived from the structure. it is not that we can't see along the same axis, it's just that i can see further than you.

i notice you failed to link to the critique of 'sensor choreography' in late 2006.

a 'loop' is a structure, and the changes in the 'sand' are connected to the changing variables in the programming. if the input is consistent, but the output variable then the hardware or your coding is a fault. unless you write it as such (and i doubt you do/can) code does not self compose; it follows you rule you give. and if the code does 're-write' itself, that is also a prescribed function (structure).

a fuller response follows.



_Comment by [mpgough](#) on March 24, 2008 at 10:48pm

your example case studies and reasoning are flawed. there are many contradictions, misinterpretations and weak concepts in your reply.

attaching the concept of 'choreography' to intended meaning is ridiculous:

"I think of choreography in those terms, namely that a particular movement and movement intent (a manner of using particular expressive techniques) composes with the forms and patterns that an audience will read (will read meaning into)"

real-time composition is an 'expressive technique' and your 'intent' is that the audience will engage with the 'sensorial flow':

" [...] I tend to think that the performance movement our audiences see has (I hope) a sensual beauty or energy that is not reducible to 'choreography' as a capture system. "

this "energy" is the meaning you intend to 'author'. as yes you have made (authored)structures that lead to the emergent content. it's foolish to deny that, but it is your claim:

"The 'sensorial flow' is not the outcome of the arrangement of hardware/software, nor a function of a '**choreographic** structure', but actually has much to do with how the performance of the wearables composes itself on a given night."

you structured the space in which the composition occurs and what may occur. for example, you explicitly define, what the scenes are, what performers are in each scene, and the costumes / wearable are used, and how the technologies are networked / mapped. your description of the "fishskin" sensors is indicative of the structure.

you may not be interested in choreography and structures yet you still use them. indeed, you are bound by them. emergence does not appear from no where, it requires a structure to emerge from. the structure need not be foremost, but is is always present.

re: study 1 - the movement of the people (audience) is part of the choreography, if effects the 'virtual' space. the shape of the room will effect the movement (options) of the audience.

re: study 2 - choreography is not about 'steps'. 'virtual' and real spaces (and interaction options) effect how we navigate spaces. you show a poor knowledge of game design and architecture. try reading this article on halo 3 [<http://tinyurl.com/2n7vvo>] re: terrain, map and interaction design. (also any ai agents in "swan quake" will follow 'rules'). if you track user behavior in swan quake you will see repeating patterns.

"The movement ideas (for "Walhalla") were scripted, but the enactment took place in response to the screenic occurrences and behaviors and often followed the cinematography."

this is a structure that directs 'interaction' and composition; choreography.

re: study 3 - the agents follow rules. this is their choreography, the actions they take are composition. the dancers interact with each other, music, and audience (you ignore this). the agents do not interact with the dancers, but the relative position of makers; they are not the same thing.

a "composing architecture" is a structure, a set of rules/processes for interaction/creation. you should read this **post** [<http://tinyurl.com/2rndfv>] or look at "conway's game of life". the rules ('choreography') lead to emergent composition. emergence requires structure, it does not 'come from nothing' as you suggest.

re: study 4 - the main structure you use is the scenario, taken from the film/novel. the scenario is subdivided into scenes, and what may occur in each scene. (unless the performers are free to enter/leave as they wish and use the wearables as they like).

seeking out 'sensorial relationships' is looking for effective structures. nodes/rules that yield interactions which are 'rich'. the 'love scene'/fish skin example also show you pointing to 'meanings' and representation (intertexts). [the **post**-dramatic is not neo-structuralism]

the bluetooth 'cross talk' shows that you did expect some outcomes. if nothing is structured, then nothing can be 'unexpected'. a structure that leads to emergent properties has a set of all possible outcomes. change the structure (add devices) and the set of outcomes changes.

costume as structure? how about oskar schlemmer "triadic ballet" (1922). there are many more examples (pre & **post**) of costume as the 'start point' and 'constraints' for a choreography / improvisation.

the judson era was the refinement of open structures with real-time, collaborative composition. with music / people, and technologies. they understood the performance was a product of the choreography. '**post choreographic**' simply implies 'emerging after' rather than 'anti' structure.

'composition via sensation' is a better description for what you are pointing to. but this is something improvisation practitioners have been doing for some time. you lack an understanding / knowledge of 'ideas and practices - informed by concepts'. and how technologies and programming functions. even your understanding of basic concepts is questionable.

movement is not language, the **post**-dramatic is not analogous.

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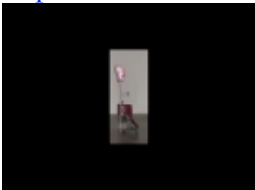
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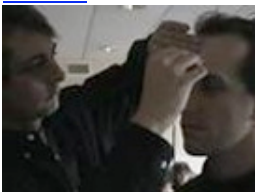
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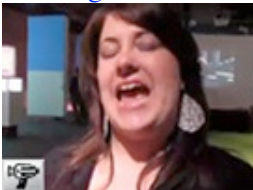
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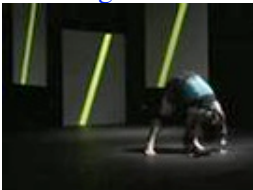
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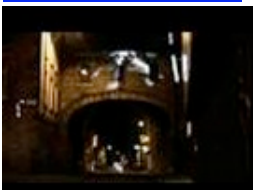
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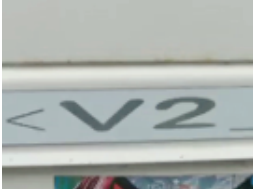
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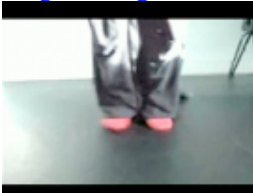
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